

IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

1. (Currently amended) A method comprising:
- recognizing an occurrence of a user-specified event;
- generating a signal to cease ~~eeasing~~ bus access, in a configurable system on a chip, upon
- the occurrence of a the user-specified event, the configurable system on a chip integrating at
- least a central processing unit, an internal system bus, and a configurable logic;
- allowing completion of all pending bus transactions;
- stopping the system clock such that the state of the hardware is held static; and
- accessing the static state of the hardware through a debug port.
2. (Currently amended) The method of claim 1, wherein the internal system bus is a pipeline bus.
3. (Original) The method of claim 1, wherein the debug port is a bus master.
4. (Original) The method of claim 1, wherein allowing completion of all pending bus transactions includes monitoring the bus for pending bus transactions.
5. (Original) The method of claim 4, wherein allowing completion of all pending bus transactions further includes generating a qualified clock freeze cycle upon completion of all pending bus transactions.

6. (Currently amended) The method of claim 1, wherein the user-specified event is programmed by a user.
7. (Currently amended) A machine-readable medium that provides executable instructions, which when executed by a processor, cause said processor to perform a method comprising:
- recognizing an occurrence of a user-specified event;
 - generating a signal to cease ~~ceasing~~ bus access, in a configurable system on a chip, upon the occurrence of a the user-specified event, the configurable system on a chip
 - integrating at least a central processing unit, an internal system bus, and a configurable logic;
 - allowing completion of all pending bus transactions;
 - stopping the system clock such that the state of the hardware is held static; and
 - accessing the static state of the hardware through a debug port.
8. (Currently amended) The machine-readable medium of claim 7, wherein the internal system bus is a pipeline bus.
9. (Original) The machine-readable medium of claim 7, wherein the debug port is a bus master.
10. (Original) The machine-readable medium of claim 7, wherein allowing completion of all pending bus transactions includes monitoring the bus for pending bus transactions.

M 11. (Original) The machine-readable medium of claim 10, wherein allowing completion of all pending bus transactions further includes generating a qualified clock freeze cycle upon completion of all pending bus transactions.

12. (Currently amended) The machine-readable medium of claim 7, wherein the user-specified event is programmed by a user.

13. (Currently amended) An apparatus comprising:

means to recognize an occurrence of a user-specified event;

means to generate a signal to cease bus access, in a configurable system on a chip, upon the occurrence of a the user-specified event, the configurable system on a chip integrating at least a central processing unit, an internal system bus, and a configurable logic;

means to allow completion of all pending bus transactions;

means to stop the system clock such that the state of the hardware is held static; and

means to access the static state of the hardware through a debug port.

14. (Currently amended) The apparatus of claim 13, wherein the internal system bus is a pipeline bus.

15. (Original) The apparatus of claim 13, wherein the debug port is a bus master.

16. (Original) The apparatus of claim 13, wherein allowing completion of all pending bus transactions includes monitoring the bus for pending bus transactions.

17. (Original) The apparatus of claim 16, wherein allowing completion of all pending bus transactions further includes generating a qualified clock freeze cycle upon completion of all pending bus transactions.

18. (Currently amended) The apparatus of claim 13, wherein the user-specified event is programmed by a user.

19. (New) The method of claim 6 wherein the user-specified event comprises a sequence of events.

20. (New) The machine-readable medium of claim 16 wherein the user-specified event comprises a sequence of events.

21. (New) The apparatus of claim 18 wherein the user-specified event comprises a sequence of events.